

HERPES GENITALIS*

SURVEY OF THIRTY CASES AND EFFECT OF TREATMENT WITH "PENOTRANE" JELLY

BY

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Herpes genitalis is commonly seen in departments for venereal diseases, but venereologists have recorded little about its clinical aspects and treatment. This article describes a series of thirty patients suffering from herpes genitalis with the object of clarifying the clinical course and its response to therapy. Twenty patients were treated with a local application of "Penotrane" (phenylmercuric dinaphthylmethane disulphonate) jelly and the response was compared with that to an inert jelly supplied in identical containers. It is realized, however, that herpes genitalis is variable in duration in spite of treatment, and that the results with the particular drug under test may have been influenced by this variability.

Herpes genitalis is a manifestation of herpes simplex, the virus aetiology of which was confirmed by Löwenstein (1919) and Grüter (1920). The virus occurs widely and has been isolated from nasal mucosa and stools. It can adapt itself harmoniously to its host so that the only manifestation is a rise in specific antibodies which is present in 90 per cent. of individuals over the age of 15 (Buddingh, Schrum, Lanier, and Guidry, 1953). In the eruptive phase herpes genitalis appears as grouped vesicles or as large bullae on an inflamed base; the sites of predilection being mucous membranes or muco-cutaneous junctions. The eruption usually appears in response to a stimulus such as a febrile illness, toxæmia, trauma, local irritation, anxiety state, or menstruation.

In the male (Fig. 1), the lesions usually appear on the glans penis, prepuce, or balano-preputial sulcus, but may occur in the urethra and give rise to urethritis (Harkness, 1950).



FIG. 1.—Herpes genitalis in the male.

In the female (Fig. 2, overleaf), the lesions appear on the hood of the clitoris, labium minus, and inner face of the labium majus. The perianal region may be involved in both males and females, and in the former this may be the result of a homosexual contact. The lesions may appear singly or in clusters of pin-head vesicles surrounding a hyperaemic base; often they coalesce to form bullae. They are usually preceded by itching, burning, or pain which often

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FIG. 2.—Symmetrical distribution of herpes genitalis in the female.

persists until they are healed; such persistence is probably the result of secondary infection of the ulcers, resulting from rupture of the vesicles. Tender enlargement of the regional lymph glands may also occur.

Once acquired, the disorder tends to be recurrent and often breaks out with each successive intercourse. This may be related to trauma as a result of intercourse, or may possibly have a psychosomatic basis, since there is often an associated syphilophobia.

The differential diagnosis includes primary syphilis, chancroid, Behçet's syndrome, lymphogranuloma venereum, Lipschutz ulceration, and simple abrasion. Every patient suffering from herpes genitalis must be subjected to repeated dark-ground examinations and to serological tests for syphilis before treatment is started. Serological tests should also be performed at regular intervals for 3 months after the lesions have healed.

Case Material

The series comprised thirty patients presenting with herpes genitalis. The average age was 30·4 years (extremes 18 to 54); 28 were male and two were female. The male patients included ten Negroes, seven of whom were from the West Indies, two from British Guiana, and one from Nigeria. The remainder consisted of nine patients from the United Kingdom, two from Eire, two from Poland, one from Hungary, one from Italy, one from India, one from

Pakistan, and one from Ceylon. One of the females was from the United Kingdom and the other from Australia.

A history of previous attacks of herpes genitalis was obtained from six patients, and in thirteen there had been no previous venereal incident. The remainder had had thirteen previous attacks of gonorrhoea, two of syphilis, one of non-gonococcal urethritis, and one of lymphogranuloma venereum.

Before starting treatment three dark-ground examinations for *Treponema pallidum* were carried out separately and all were negative. The Wassermann and VDRL (or Kahn) reactions were negative in all cases before and after treatment.

Treatment

The thirty cases were divided into two series. Series A was composed of twenty cases who were treated with "Penotrane" jelly. Series B was composed of the remaining ten cases, who were treated with inert jelly. The patient was instructed to apply the jelly liberally twice a day to the lesions and to return after 3 days and after 7 days of treatment. The lesions were then inspected for signs of healing and the patient's own observations were also noted. If the lesions had not healed by 7 days, the patient was instructed to attend again after an interval of a further week. When the lesions had healed, the patient was instructed to return again at monthly intervals for the next 3 months for serological tests for syphilis.

The time that elapsed between the onset of symptoms and coitus varied from 3 to 188 days (average 36·6) in seventeen cases; in the remainder it was unknown. In six patients who had had a previous attack, the duration was 10 to 21 days (average 14·5). A further point of interest is that only two female patients, compared with 28 males, were seen during the time that the series was collected.

There was a recurrence after treatment in three cases after 1 month, in one at 3 months and in a third at 4 months, respectively. Of the 30 patients under observation, sixteen defaulted after 1 week, and five after 2 weeks (in all instances the lesions had healed); of the remainder, four defaulted after 1 month, two after 2 months, one after 3 months, one after 4 months, and one after 5 months (Table I), but these patients had negative Wassermann and VDRL (or Kahn) reactions at the time of their last attendance.

TABLE I
CASES FOLLOWED AND PERCENTAGE DEFAULTING

Time of Follow up ..	1-7 days	7-14 days	1 mth	2 mth	3 mth	4 mth	5 mth
No. of Patients Attending ..	30	14	9	5	3	2	1
Percentage Defaulting	Nil	53·3	60	83·3	90	93·3	96

Results

There was a difference in the length of time the lesion took to heal in series A compared with series B (Table II).

TABLE II
RESULTS OF TREATMENT

Series	Duration of Lesion (days)						Total
	Before Treatment			After Treatment			
	Min.	Max.	Mean	Min.	Max.	Mean	
(A) Treated with "Penotrane" Jelly ..	1	17	6.7	2	6	4.25	10.95
(B) Treated with Inert Jelly ..	2	21	6.1	3	13	7.1	13.2

"Penotrane" jelly appeared to shorten the duration of the lesion after commencement of therapy by 2.85 days and the total duration of the lesion by 2.25 days, when compared with the effect of the inert jelly. Another point of interest is the similarity in the average length of the time the lesions took to heal with an inert jelly (*i.e.* 13.2 days) and with no treatment (*i.e.* 14.5 days). The probable explanation for the enhanced effect of "Penotrane" jelly on the healing of herpes genitalis is the elimination of secondary infection by its antiseptic properties. This appears to be supported by the fact that most of the patients who were treated with it stated the irritation associated with the lesions disappeared after 24 hours of use. This observation was not noted with those using inert jelly. It is doubtful however, whether "Penotrane" jelly has any effect on the herpes virus.

Discussion

The advantage of this form of therapy is that it is locally applied and therefore easy to use. It is free of the sensitizing effects that might be obtained with systemic or local antibiotic therapy and is relatively cheap (retail price 3 shillings for 30 g.).

The disadvantage of this preparation is that once applied it will vitiate the results of any dark-ground examination for syphilis, but this objection will apply to any form of antiseptic application.

Summary

A clinical study of thirty patients suffering from herpes genitalis is described.

The response in twenty patients treated with "Penotrane" jelly was compared with that in 10 patients treated with an inert jelly. The results showed that when "Penotrane" jelly was used the lesion healed 2.85 days sooner than when an inert jelly was used.

The advantages and disadvantages of "Penotrane" jelly are discussed.

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REFERENCES

- Buddingh, G. J., Schrum, D. I., Lanier, J. C., and Guidry, D. J., (1953) *Paediatrics*, **11**, 595.
 Grüter, W. (1920). *Klin. Mbl. Augenheilk.*, **65**, 398.
 Harkness, A. H. (1950). "Non-Gonococcal Urethritis," p.196. Livingstone, Edinburgh.
 Löwenstein, A. (1919). *Münch. med. Wschr.* **66**, 769.

Herpès génital

Revue de 20 cas traités par la gelée de "Pénotrane"

RÉSUMÉ

L'auteur décrit une série de 30 malades atteints d'herpès génital.

La réponse de 20 malades traités par la gelée de "Pénotrane" est comparée à celle de 10 malades qui reçurent un remède factice. La lésion disparut 2,85 jours plus tôt chez ceux qui reçurent du "Pénotrane" que chez les autres.

On discute les avantages de l'emploi du "Pénotrane".